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EXAMINER

DEMICO, MATTHEW R

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 08/04/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

12

Office Action Summary

Application No.

09/412,792

Applicant(s)

CONNELLY, JAY H. 

Examiner

Matthew R Demicco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/26/03 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-21 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,172,677 to Stautner et al in view of U.S. Patent No. 5,946,052 to Ozkan et al. and further in view of U.S. Patent No. 6,268,849 to Boyer et al.

Regarding Claims 1-2 and 6, Stautner discloses a method whereby scheduling information (Col. 4, Lines 14-18) and audio/video data are transmitted to a receiver that can identify and execute an application capable of processing the data (Col 3, Lines 40-56 and Col 5, Lines 44-46). The viewer application, as stated by Stautner, may be a web page, chat session, or a game, for example. Figure 1 clearly demonstrates the scheduling of content at given times for specific durations, and the data is retrieved and stored or executed at the specified time (Col 4, Lines 9-28). What is not disclosed, however, is that the scheduling information sent to the receiver identifies an encoding format that the viewer applications use when processing the broadcast of data at the scheduled time. Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). Ozkan is evidence that ordinary workers in the art would recognize the benefit of embedded encoding format data within electronic program guide scheduling information in order to identify various decoding programs for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of Stautner with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Stautner in view of Ozkan does not disclose, however, is selecting one viewer application capable of processing a broadcast of data in the encoding format at the scheduled time from a plurality of viewer applications. Boyer discloses a television program guide method (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a

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broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to decode the broadcast data. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Stautner in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claims 3-5, Stautner discloses a method wherein the content provider of the information is identified (See Figure 5). As demonstrated in Figure 2, this method identifies the channel that data will be broadcast and received on. Data is retrieved and stored or executed at the specified time as stated above. The method of Stautner identifies many different channels of communication, including wireless, cable, and satellite transmissions (Col 1, Lines 51-57).

Regarding claim 7, Stautner discloses a method by which a locally stored database of broadcast information is updated frequently (Col 4, Lines 9-14). As shown in Figure 1, once the information is received, it is presented to the user who may select a channel to view, and the content specified will start at the predetermined time as shown.

Regarding claim 9, Stautner discloses a method in which multiple channels of information are presented to the user as shown in Figure 2. Multiple sources of data corresponding to multiple viewer applications at different times are shown.

Regarding claims 10-13, Stautner discloses a system whereby scheduling information (Col. 4, Lines 14-18) and audio/video data are transmitted to a receiver that can identify and execute an application that processes the data (Col 3, Lines 40-56 and Col 5, Lines 44-46). The viewer application, as stated by Stautner, may be a web page, chat session, or a game, for example. Figure 1 clearly demonstrates the scheduling of content at given times for specific durations, and the data is retrieved and stored or executed at the specified time (Col 4, Lines 9-28). Additionally, Figure 1 identifies the channel that data will be broadcast on. The method of Stautner identifies the content provider of the information (See Figure 5). What is not disclosed, however, is that the scheduling information sent to the receiver identifies an encoding format that the viewer applications use when processing the broadcast of data at the scheduled time. Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). Ozkan is evidence that ordinary workers in the art would recognize the benefit of embedded encoding format data within electronic program guide scheduling information in order to identify various decoding programs for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of Stautner with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Stautner in view of Ozkan does not disclose, however, is one viewer application capable of processing a broadcast of data in the encoding format at the scheduled time, selected from a plurality

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of viewer applications. Boyer discloses a television program guide system (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to process the received broadcast data. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Stautner in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claims 14 and 15, Stautner discloses a method of processing data whereby scheduling information containing broadcast times (Col. 4, Lines 14-18) and audio/video data are transmitted to a receiver that can identify and execute an application that processes the data (Col 3, Lines 40-56 and Col 5, Lines 44-46). The scheduling data is stored in a local database table which has entries indexed by broadcast times and channels as demonstrated by Figure 1. Based on the information in this scheduling table, specific viewer applications such as chat sessions or web pages may be selected as shown in Figure 2. What is not disclosed, however, is that the scheduling information sent to the receiver identifies an encoding format that the viewer applications use when processing the broadcast of data at the scheduled time. Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). Ozkan is evidence that ordinary workers in the art would recognize the

benefit of embedded encoding format data within electronic program guide scheduling information in order to identify various decoding programs for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of Stautner with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Stautner in view of Ozkan do not disclose, however, is receiving scheduling information that identifies a viewer application, selected from a plurality of viewer applications for processing the broadcast. Boyer discloses a television program guide method (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to decode the broadcast data. The encoding information of Ozkan is inherently linked to the viewer application used to decode it such as those disclosed by Boyer. This reads on the claimed receiving scheduling information that identifies an encoding format and a viewer application. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Stautner in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claim 16, Stautner discloses a method for processing data whereby scheduling information containing broadcast times (Col. 4, Lines 14-18) and audio/video data are transmitted to a receiver that can identify and execute an application that processes the data (Col 3, Lines 40-56 and Col 5, Lines 44-46). The scheduling data is stored in a local database table which has entries indexed by broadcast times and channels as demonstrated by Figure 1. Based on the information in this scheduling table, specific viewer applications such as chat sessions or web pages may be selected and executed as shown in Figure 2.

Regarding claim 17, Stautner discloses a method (See Figure 2) in which an electronic program guide database is equivalent to the claimed "scheduling table" in that the database contains not only scheduling times and channels but also the associations of the icons and the specific applications to which they are associated. Therefore, when a user clicks on an icon (See Figure 2, Element 60), the system must query the "scheduling table" (database) to find which particular application to launch.

Regarding claims 18-19, Stautner discloses a system for receiving data broadcasts with an interface as shown in Figure 2. The system of Stautner may contain a data storage device on which viewer applications may reside (Col. 5, Lines 44-46). The device also contains a processor that is used to execute the specified viewer application (Col 1, Lines 36-51). The system of Stautner is based on a personal computer (Col. 1, Lines 36-41), which is understood in the art to execute a code-base (operating system) from a local storage device. What is not disclosed however is that the system receives broadcasts of data in an encoding format and that the encoding format is used to select and execute a

viewer application. Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). This encoding format information is used to decode the broadcast data (Col. 11, Lines 6-18). Ozkan is evidence that ordinary workers in the art would recognize the benefit of using embedded encoding format data within electronic program guide scheduling information to identify various decoding programs for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Stautner with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Stautner in view of Ozkan do not disclose, however, is selecting and executing one viewer application from plurality of viewer applications based on scheduling information and encoding format of the broadcasts. Boyer discloses a television program guide method (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to decode the broadcast data based on the encoding format of the broadcast. Further, since the encoding data is embedded in the scheduling information as stated by Ozkan, the processor must select and execute the application based on the scheduling data and encoding format as claimed. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention

was made to further modify the method of Stautner in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claims 20-21, Stautner discloses a content guide, the underlying control program (operating system), which is a software application (Col. 3, Lines 40-50). The storage device above stores the underlying control application for receiving new scheduling information as well as updates to the database and viewer applications (Col. 4, Lines 9-14). It is well known in the art that the underlying control application, or operating system, is responsible for handling all spawned child processes. Therefore, the interface of Stautner running on a personal computer is the operating system or parent process, and this operating system forks off helper applications to decode data based on information from the scheduling table as indicated above. In a personal computer, such as the one stated above, the operating system maintains a table of all available viewer applications, often referred to as coder/decoders (CODECs) as disclosed by Boyer (Col. 6, Lines 11-22). Therefore, the control application must query a table of viewer applications in order to select and execute the proper viewer for the broadcast data's encoding format.

Regarding claim 26 and 28, Stautner discloses a device that stores and executes instructions (Col. 5, Lines 43-46). One function of the code the computer executes is that of a user interface that receives scheduling information for various content formats including video, audio, games, and applications (See Figure 2), and broadcast data at the scheduled time. The received data is processed with a specific viewer application once it

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is received and displayed to the user (Cols. 3-4, Lines 40-8). The viewer application can decode the received data from a plurality of sources and data types (Col. 1, Lines 45-51). What is not disclosed however is that the system receives broadcasts of data in an encoding format and that the encoding format is used to select and execute a viewer application. Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). This encoding format information is used to decode the broadcast data (Col. 11, Lines 6-18). Ozkan is evidence that ordinary workers in the art would recognize the benefit of using embedded encoding format data within electronic program guide scheduling information to identify various decoding programs for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the system of Stautner with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Stautner in view of Ozkan do not disclose, however, is the selection of one viewer application from a plurality of viewer applications. Boyer discloses a television program guide method (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to decode the broadcast data. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to further modify the method of Stautner in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claim 27, Stautner discloses a device that receives scheduling information that identifies the channels on which data will be broadcast (See Figure 1).

Regarding claim 29, Stautner discloses a device that that executes code on a computer to retrieve and display scheduling information as shown in Figure 1. This information may be stored in a database table on a local storage device (Col. 4, Lines 9-12). Entries are indexed by broadcast times as shown in Figure 1.). The interface, running on a personal computer is the operating system that executes helper applications to decode data based on information from the scheduling table as indicated above. In a personal computer, such as the one stated above, the operating system maintains a table of all available viewer applications, or CODECs. Therefore, in the system of Stautner (See Figure 2), when a user clicks on an icon, the control application must query a table of viewer applications in order to select and execute the proper viewing application.

Regarding claim 30, Stautner discloses a device that selects a viewer application from a table as shown above. This table lists viewer applications supported by the system.

5. Claims 22-25 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,659,350 to Hendricks et al. in view of Ozkan et al. and further in view of Boyer et al.

Regarding claim 22, Hendricks discloses a computer with data storage (See Figure 4) that can gather a variety of program signals for broadcasting and encode them

efficiently for available bandwidth (Col. 3, Lines 31-42). This computer executes code that sends information to a receiver that includes the scheduled time (See Figure 21) and content format (See Figure 18) of the data broadcast, and additionally broadcasts the data (See Figure 1). The receiver has a plurality of inputs (Col. 10, Lines 43-45) and one or more viewer applications (Col. 14, Lines 62-65). What is not disclosed, however, is that the scheduling information sent to the receiver identifies an encoding format that the viewer applications use when processing the broadcast of data at the scheduled time.

Ozkan discloses a terminal that receives program guide information including an encoding format (See Figure 5 and Col. 10, Lines 14-63). Ozkan is evidence that ordinary workers in the art would recognize the benefit of embedded encoding format data within electronic program guide scheduling information in order to identify various decoding applications for the decoding and playback of broadcast data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the Device of Hendricks with the embedded encoding format information of Ozkan in order for a user's terminal to identify what broadcast data it is capable of receiving and decoding using one or more viewer applications. What Hendricks in view of Ozkan do not disclose, however, is the encoding formation being indicative of one viewer application capable of processing a broadcast of data in the encoding format selected from a plurality of viewer applications. Boyer discloses a television program guide method (See Figure 9) that has a plurality of viewer applications (plug-ins) capable of processing a broadcast of data in a specific encoding format (Col. 6, Lines 11-22). It is inherent in such a system that one of these decoder applications must be selected to

decode the broadcast data. Boyer is evidence that ordinary workers in the art would recognize the benefits of using multiple decoder applications in an electronic program guide. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Hendricks in view of Ozkan with the selection of one of a plurality of viewer applications of Boyer in order to provide support for many different types and formats of broadcast data.

Regarding claim 23, the system of Hendricks can deliver to the receiving unit the content provider (See Figure 17), a viewer age and scheduled broadcast channel (See Figure 16).

Regarding claim 24, the system of Hendricks runs software instructions that facilitate the broadcasting of data to the receiving terminal (Col. 6, Lines 11-19) at a scheduled time as shown above.

Regarding claim 25, the system of Hendricks broadcasts information about multiple scheduled times and content formats simultaneously as illustrated by Figure 6b. Additionally, the receiving terminal is equipped to handle multiple broadcasts of viewer data simultaneously using multiple decompression applications (Col. 11, Lines 40-46) when sent by the broadcasting system. The viewer application may be selected from a plurality of viewer applications as disclosed by Boyer.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stautner et al. in view of Ozkan et al. and further in view of Boyer, further in view of the Advanced Television Enhancement Forum Specification (ATVEF). As stated above, Stautner in view of Ozkan and further in view of Boyer disclose a method of broadcasting and receiving scheduling data and

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video using header and payload information. Neither Stautner, Ozkan, nor Boyer disclose the use of the ATVEF format for transmitting data. The Advanced Television Enhancement Forum Specification (ATVEF) outlines the implementation and use of the ATVEF format for distributing video content in conjunction with other multimedia-rich hypertext data. The ATVEF Specification is evidence that ordinary workers in the art would recognize the benefit of utilizing the ATVEF format to transport and display real-time video content in conjunction with other hypertext multimedia. Therefore, it would have been obvious to ordinary workers in the art to combine the user interactive video transmission and receiving system of Stautner in view of Ozkan and further in view of Boyer with the ATVEF format of the ATVEF Specification in order to facilitate transporting and embedding video within a hypertext linked multimedia display and vice versa to insure compatibility with a wide range of devices using a well known standard (ATVEF).

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R Demicco whose telephone number is (703) 305-8155. The examiner can normally be reached on Mon-Fri, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-5359 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

MRD

mrd
July 21, 2003

Andrew Faile
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